

National incidence and mortality rates

In 1996 there were 9,556 new cases of breast cancer diagnosed in women in Australia, giving an age-standardised incidence rate of 94.9 per 100,000 woman-years (Australian 1991 Population Standard). The risk of developing breast cancer before age 75 was 1 in 12.

In 1996, there were 2,619 deaths from breast cancer, which equates to an age-standardised mortality rate of 24.9 per 100,000 woman-years (Australian 1991 Population Standard).

Table A5 (in Appendix 2) shows the age-standardised incidence and mortality rates for each year from 1982 to 1996 for Australia, together with the ratios of mortality to incidence. The mortality to incidence proportion in 1996 was 26.3%.

National trends in incidence and mortality

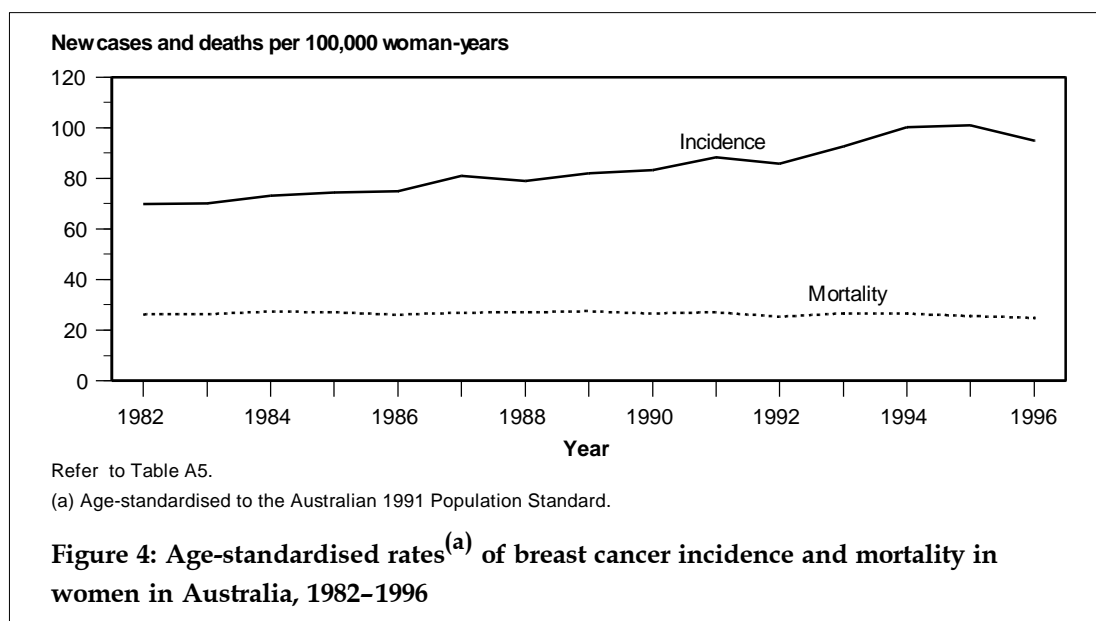
Age-standardised incidence rates increased substantially from 72.6 new cases per 100,000 woman-years in 1982–1986 to 95.0 new cases per 100,000 woman years in 1992–1996 (Table 4). Age-standardised mortality rates remained stable in the first two periods but there was a slight decrease (approximately 4%) in mortality in 1992–1996.

Table 4: Age-standardised incidence and mortality rates^(a) per 100,000 woman-years and 95% confidence intervals (CI) for breast cancer in women in Australia, 1982–1986, 1987–1991 and 1992–1996

Period	Incidence			
	AS Rate (Aust 1991)	95%CI	AS Rate (World)	95%CI
1982–1986	72.6	71.7–73.4	58.4	57.6–59.1
1987–1991	82.7	81.9–83.6	66.9	66.2–67.6
1992–1996	95.0	94.1–95.9	77.8	77.1–78.6
Period	Mortality			
	AS Rate (Aust 1991)	95%CI	AS Rate (World)	95%CI
1982–1986	26.6	26.1–27.1	20.6	20.1–21.0
1987–1991	27.0	26.6–27.5	20.8	20.5–21.2
1992–1996	25.8	25.4–26.3	19.7	19.4–20.1

(a) Age-standardised rates are expressed per 100,000 woman-years and are age-standardised to the Australian 1991 Population Standard (AS Rate (Aust 1991)) and the World Standard Population (AS Rate (World)). See 'Methods' pages 3 and 4.

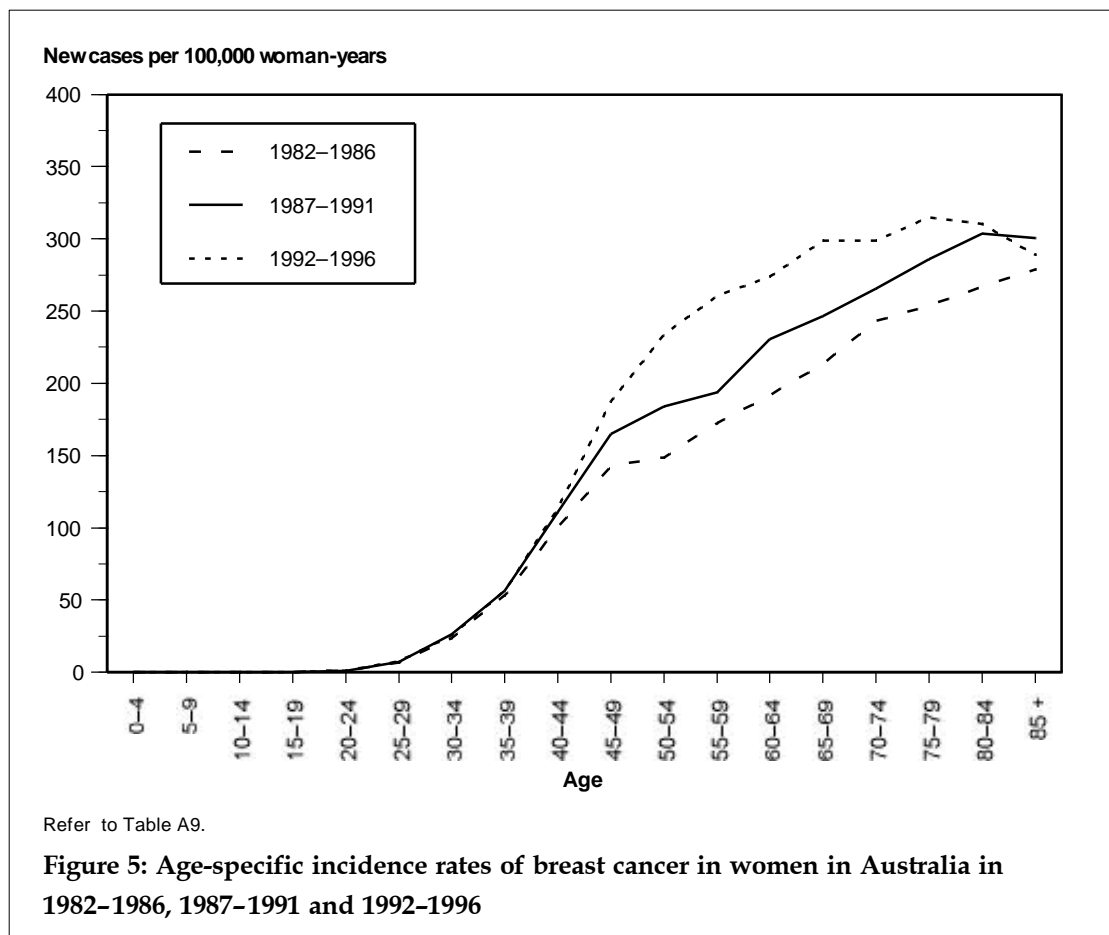
Despite the fall between 1995 and 1996, incidence rates increased by an average of 2.2% a year from 1982 to 1996. This trend is statistically significant and is probably the result of increased detection of breast cancer through the introduction of mammographic screening. Age-standardised mortality rates in women in Australia were stable from 1982 to 1994; there was a small decline (4%) in 1995 and a further small decline (3%) in 1996 (Figure 4).



National incidence rates by age

Age-specific incidence rates of breast cancer in 1992–1996 were low in women aged less than 30 years (0.0–7.4 per 100,000 woman-years) compared with those for older women (Figure 5). They increased rapidly from 25.6 per 100,000 woman-years in women aged 30–34 years to 187.5 per 100,000 woman-years in women aged 45–49 and then at a slower rate to 289.0 per 100,000 woman-years in woman aged 85 years and over.

Between 1982–1986 and 1992–1996, age-specific rates in women aged less than 45 years did not change (Figure 5). For women aged 45 years and over, rates were lower in 1982–1986 than in 1987–1991 but the increase with age was similar in both periods. In 1992–1996, however, the age-specific rate increased much more rapidly between ages 40 and 80 than in either of the earlier periods. It is probable that this divergence in rates is mainly the result of increased detection of breast cancer through the introduction of mammographic screening.



National incidence trends by age

Between 1982–1986 and 1992–1996 breast cancer incidence rates increased by 37% in women aged 50 years and over (Table 5). There was also a slight rise (7%) in the rate for women aged 15–39 years and a somewhat larger increase (23%) in the rate for women aged 40–49 years.

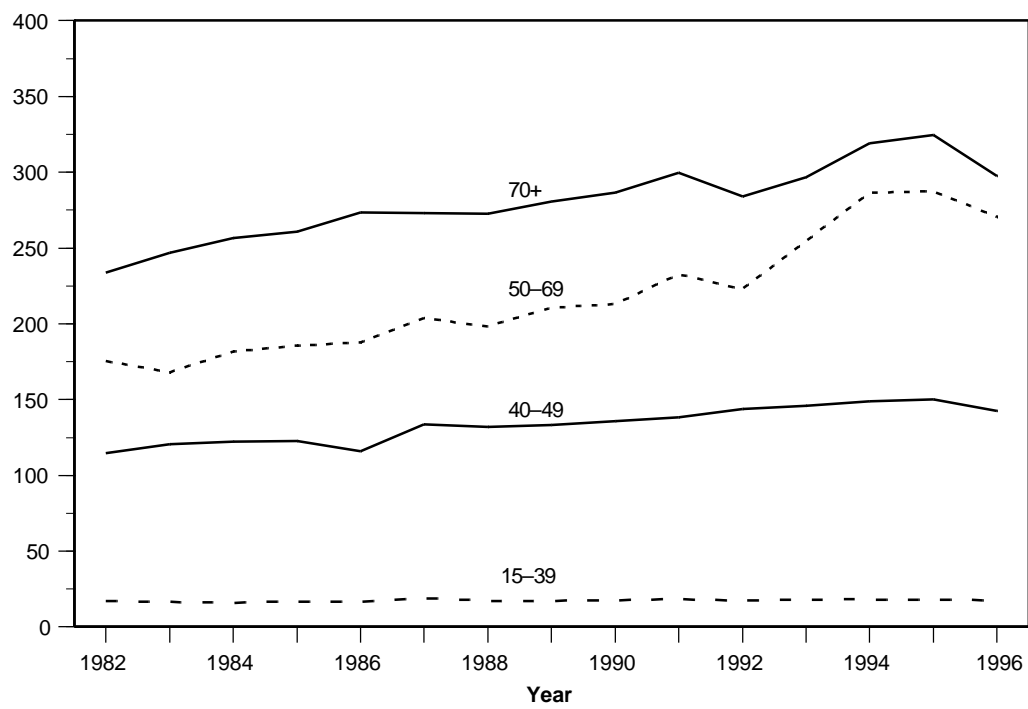
Table 5: Age-standardised incidence rates^(a) of breast cancer per 100,000 woman-years in Australia, by age, 1982–1986, 1987–1991 and 1992–1996 (95% confidence intervals)

Period	Age group (years)			
	15–39	40–49	50–69	70+
AS Rate (Aust 1991)				
1982–1986	16.6 (16.0–17.3)	119.2 (115.9–122.5)	179.7 (176.6–182.9)	254.9 (249.3–260.5)
1987–1991	17.9 (17.2–18.5)	134.8 (131.6–137.9)	211.9 (208.5–215.2)	282.7 (277.2–288.2)
1992–1996	17.8 (17.2–18.5)	146.3 (143.3–149.3)	264.8 (261.1–268.4)	304.4 (299.1–309.8)
AS Rate (World)				
1982–1986	14.1 (13.6–14.7)	121.6 (118.2–125.0)	177.6 (174.4–180.7)	253.7 (247.5–258.9)
1987–1991	15.1 (14.6–15.7)	137.9 (134.6–141.1)	209.7 (206.4–213.0)	279.8 (274.2–285.4)
1992–1996	15.2 (14.6–15.7)	150.5 (147.5–153.6)	262.6 (259.0–266.2)	302.9 (297.5–308.4)

(a) Age-standardised rates are expressed per 100,000 woman-years and are age-standardised to the Australian 1991 Population Standard (AS Rate (Aust 1991)) and the World Standard Population (AS Rate (World)). See 'Methods' pages 3 and 4.

Incidence rates in women aged 50 years and over increased steadily from 1982 to 1995 but were lower in 1996 than in 1994 or 1995 (Figure 6). Between 1992 and 1994 there was a particularly sharp increase (29%) in the rate for women aged 50–69 years. Table A11 (Appendix 2) shows incidence rates for these age groups for each year from 1982 to 1996.

New cases per 100,000 woman-years



Refer to Table A11.

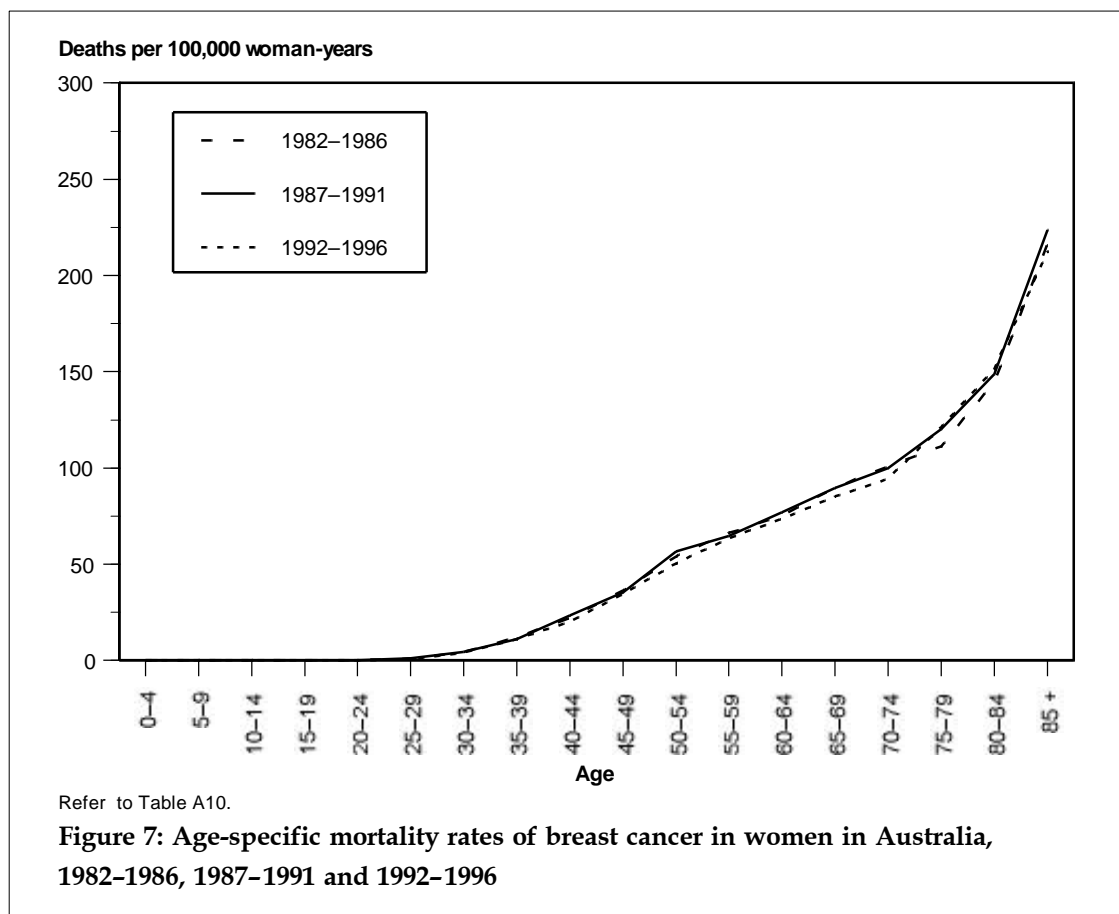
(a) Age-standardised to the Australian 1991 Population Standard.

Figure 6: Age-standardised incidence rates^(a) of breast cancer in women in Australia by age, 1982-1996

National mortality rates by age

Age-specific mortality rates of breast cancer were low among women aged less than 35 (Figure 7) but, they increased rapidly from that age. In 1992–1996 the age-specific death rate increased from 11.2 deaths per 100,000 woman-years at 35–39 years to 50.4 at 50–54 years, 85.2 at 65–69 years and 212.4 at 85 years and over (Figure 7).

In contrast with incidence, over the three 5-year periods, there was very little change in age-specific mortality rates (Figure 7).



National mortality trends by age

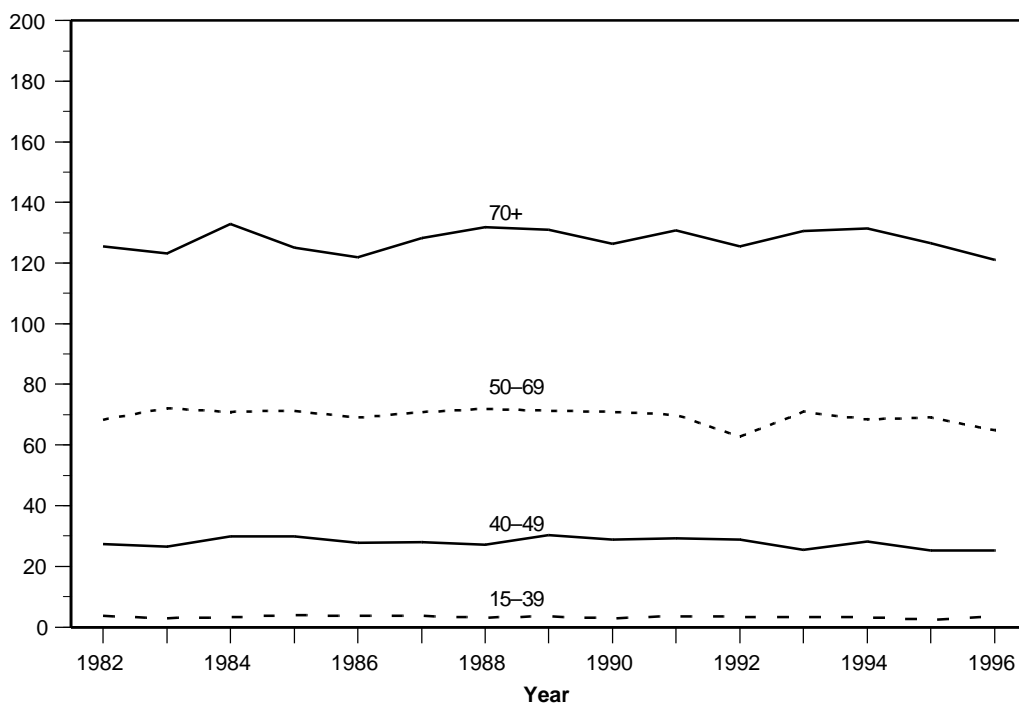
Mortality from breast cancer has remained relatively stable in all age groups, although rates in 1992–1996 were slightly lower than in 1982–1986 for all age groups except women aged 70 years and over (Table 6), however on a single year analysis mortality rates in this age group showed a downward trend between 1994 and 1996. Figure 8 and Table A12 show mortality rates by age group, for each year from 1982 to 1996.

Table 6: Age-standardised mortality rates^(a) of breast cancer per 100,000 woman-years in women in Australia, by age, 1982–1986, 1987–1991 and 1992–1996 (95% confidence intervals)

Period	Age group (years)			
	15–39	40–49	50–69	70+
AS Rate (Aust 1991)				
1982–1986	3.4 (3.1–3.7)	28.3 (26.7–29.9)	70.3 (68.3–72.3)	125.7 (121.8–129.6)
1987–1991	3.3 (3.0–3.6)	28.8 (27.3–30.2)	71.0 (69.1–72.9)	129.7 (126.0–133.3)
1992–1996	3.1 (2.9–3.4)	26.6 (25.3–27.8)	67.2 (65.4–69.0)	126.9 (123.5–130.3)
AS Rate (World)				
1982–1986	2.9 (2.7–3.2)	29.1 (27.4–30.7)	69.1 (67.2–71.1)	123.3 (119.4–127.2)
1987–1991	2.8 (2.5–3.0)	29.5 (28.0–31.0)	69.9 (68.0–71.8)	126.5 (122.8–130.2)
1992–1996	2.6 (2.4–2.8)	27.4 (26.1–28.7)	66.0 (64.2–67.8)	122.9 (119.6–126.3)

(a) Age-standardised rates are expressed per 100,000 woman-years and are age-standardised to the Australian 1991 Population Standard (AS Rate (Aust 1991)) and the World Standard Population (AS Rate (World)). See 'Methods' pages 3 and 4.

Deaths per 100,000 woman-years



Refer to Table A12.

(a) Age-standardised to the Australian 1991 Population Standard.

Figure 8: Age-standardised mortality rates^(a) of breast cancer in women in Australia by age, 1982-1996